Network Control Center

STDN DAILY REPORT
FOR GMT DAYS
16,17, 18, AND 19 AUGUST , 2001

Part I. Operations

16 AUG.

A. SN Anomalies

1. TRMM Support **16/0000-2359Z**

Spacecraft is still in Sun Acquisition mode.
TTR # 24007.

Multiple SSAF/R No Data Loss Declared.

2. STGT/XTE Support **16/1434-1450Z**

Negative acquisition, no RF. POCC was contacted and was unaware of the SHO. TTR # 24009.

TDS SSA1/R 15 Mins 14 Secs Svc Loss

3. STGT/HST Support **16/2112-2115Z**

During the event the POCC found that they were not receiving UPD and could not send GCMRs to reconfigure for their event. POCC investigation revealed the UPD/GCMR line had been accidentally disconnected in-house.
TTR # 23010

POCC OPERATOR
TDW MAR-1 2055-2147Z 3 Mins 12 Secs Svc/Data Loss Non-Recov

B. ISS Anomalies - None.

C. GN Anomalies:

1. WSG/SWAS Support 16/0211-1154Z

Commands did not uplink. Following AOS, noticed that when a command was sent to S/C, the command counter was not updating. When the command came in, a message Tele-command with CDH sequence number 0 was not processed. The spectrum analyzer was showing the uplink carrier with modulation. The TSS-2000 screen looked normal. Decided to do a resweep to see if this would clear the problem. No success. It does not appear that any of the commands went to the S/C. Everything at Wallops looked nominal. Unknown where the problem is located. CDS ID # 19500

UNKNOWN
LEO-T 0213-0223Z 11 Min 02 Secs Svc/Data Loss

2. SGS/EO1 Support 16/1212-1217Z

T1 line went down at AOS. Came back during support and EO1 was able to re-dump the data. No data loss. The local carrier, TeleNor, informed us this problem is caused by very bad weather in the south of Norway, in Rogaland.
CDS # 19502

COMM ANOMALY
11M 1212-1225Z 15 Mins Svc Loss

3. AGS/FAST Support 16/1638-1645Z

PAC #3 failed to start up for this event. PAC 3 failed to load for this support ""Error = Failed to execute VLSI command" "Received a null response to command 'Activate Setup by Data' from VLSI TOTS2" (PAC 3). System rebooted, FAST catalog loaded, and manual started Real time TPCE window. Everything up and running approximately AOS +7. Confirmed that commands were being received by TPCE and transmitted.

Contact the project via phone post pass and they confirmed that no critical commands were scheduled for this support. The support was done entirely by their automated system and the TPCE showed 5 commands made it through the system. Data played back from Tape Post Pass for shipment to project. CDS ID # 19506

STATION EQUIPMENT
TOTS-1 1638-1703Z 7 Mins Svc Loss

4. WGS/TRACE Support 16/2145-2154Z

At scheduled AOS there was no sign of a downlink, went to the 9M and called up Trace on the STPS. Compared the angles several times and the angles matched TOTS. Reason for negative acq. is unknown, antenna showed good RF through the system both pre and post pass. CDS ID # 19508

UNKNOWN
TOTS 9 Mins Svc/Data Loss Recov Unknown

17 AUG.

A. SN Anomalies:

1. WSC/TRMM Support 17/0000-1735Z

Spacecraft is out of Sun Acquisition Mode. TTR #24011

No Data Loss Declared

B. ISS Anomalies - None.

C. GN Anomalies:

1. WGS/MULTIPLE Support 17/0158-0244Z

Data receivers not getting any downlink data on SAMPEX orbit 49751. TOTS configured normally. Following AOS, data receivers did not lock on data. Tracking receivers had good lock. Started troubleshooting the problem following the SAMPEX support. Rebooted all systems to see if this would clear the problem. Unsuccessful. Once the systems were back up, it was too late to shift the SWAS support to the LEO-T. Further troubleshooting shows that we don't have a signal coming from the down converter area. TOTS red for support. All other supports have been shifted to the LEO-T and 7.3m antennas. Troubleshooting ongoing. CDS ID # 19509

STATION EQUIPMENT
TOTS 0158-0208Z 10 Mins Svc/Data Loss Recov Unknown
TOTS 0231-0243Z 12 Mins Svc/Data Loss Recov Unknown

2. WGS/SWAS Support 17/1244-1254Z

LEOT not processing commands. After go for command project sent command and it was not processed by the system. Operator preformed command system reset and project attempted another command and this time system processed the command. All other commanding was completed with no further problems. CDS ID # 19510

STATION EQUIPMENT
No Svc/Data Loss Declared

18 AUG.

A. SN Anomalies:

1. WSGT/HST Support 18/0455-0457Z

Telemetry hit TDRS-4 composite downlink perturbation which caused the element separator to drop lock. This resulted in a 1 minute 3 second return service loss.

TTR # 24012 DR # 43372

STATION EQUIPMENT
TDE SSA2F/MAR 1 Min. 3 Sec. Svc/Data Loss (Non-Recov)

B. ISS Anomalies:

1. STGT/ISS Support 18/2359-0008Z

During the event, the SSA1R “A” (HSM) and “B” (prime) chains were experiencing dropouts that were expected per Comm Coverage INFN040. After a dropout, the HSM chain locked but the prime chain frame sync stayed in search mode. When the problem was realized, a manual chain failover from SSA1R-B to SSA1R-A was performed restoring service. TTR # 24014 DR # 43375

STATION EQUIPMENT
TDS SSA1F/R 2340-0020Z 8 Min. 36 Sec. Svc/Data Loss

C. GN Anomalies:

1. AGS/WIRE Support 18/0718-0726Z

Negative acquisition of spacecraft. TOTS-1 did not receive a downlink at AOS, time bias of +/- 60 seconds was inserted without finding any downlink. RF was applied to the antenna through the test inject and a downlink signal was received on all 4 receivers. RF was removed from the test inject and the signal was lost.

TOTS-1 8 Min. Svc/Data Loss (Non-Recov)

2. WGS/SNOE Support 18/1544-1548Z

At AOS had no bit sync lock. After expected AOS operator noticed system had no lock on data from the spacecraft. Investigation found that the combiner was lock on a side.

Reset combiner several times before it locked properly.
CDS ID # 19515

STATION EQUIPMENT
LEO-T 1544-1554Z 2 Min. 49 Sec. Svc/Data Loss

3. AGS/FAST Support 18/1631-1636Z

Analog Switch failed to load for this event. Problems noted: Analog Switch failed to set up prior to AOS (received a "NAK"). Attempted to reload the system but not enough time for the setup to complete prior to AOS. The operator had to load the analog switch from the back up master, start the tapes manually, bring the transmitter up manually (and sweep) and start the TDF manually. No loss of data to the PAC but do not know how close to AOS (+ or -) it was before getting the tapes started. The Data from the PAC will be saved to the PTP prior to FTP 'ing for possible play back purposes (just in case). Commands appear to be going out ok, FAST Operations appeared to be running in automated mode (based on the number of commands sent and how often they occurred). Data into "Q" @ 230/17:26:05z.
CDS ID # 19516

STATION EQUIPMENT
TOTS-1 1733-1746Z 5 Min. Command Service loss only

19 AUG.

A. SN Anomalies - None.

B. ISS Anomalies - None.

C. GN Anomalies:

1. AGS/EO1 Support 19/1924-2015Z

11 Meter PTP#1 Card 3 failure. At PTP start time the operator noted that there was no modulation on the command sub-carrier. The 2 kbps clock from the 782 SC Generator

was confirmed at the patch panel. The analog MTX switch was bypassed and still the PTP #1 card 3 did not indicate a clock present. Post pass the PTP was recycled using a hard resent. This did not clear the problem. The PTP was taken down to a power off condition and then restarted. The problem cleared. CDS ID # 19518

STATION EQUIPMENT
11Meter 1924-1936Z 12 Mins Svc Loss

Part II. Testing Anomalies

A. SN Test - None.

B. GN Test:

TDRS-I NETWORK 16/1630-16/2120Z JPL/RID(DSS-66)
TESTING with RID BSS/WSC/NISN/
and BOEING FDF/BLDG.12/MOSA

OBJECTIVES:
1. VERIFY DSS-66 CAN TRANSMIT (1 & 4 KBPS) TELEMETRY DATA TO BSS.
2. VERIFY DSS-66 CAN RECEIVE COMMANDS DATA FROM BSS.
3. VERIFY DSS-66 CAN TRANSMIT TRACKING DATA TO BSS.

RESULTS: OBJECTIVE NOT MET

REMARKS:
OBJECTIVES NOT MET. TEST WAS CANCELLED. RID EXPERIENCED RANGING EQUIPMENT SET-UP PROBLEMS AT START TIME. PROBLEM WAS CORRECTED BUT BOEING REQUESTED TEST BE CANCELLED DUE TO PRIOR COMMITMENTS. TEST
IS RESCHEDULED FOR 8/20/01.

2. TDRS-I NETWORK 17/0250-170650Z JPL/GDS (DSS-16)/

TESTING WITH GDS(DSS-16) AND BOEING — BSS/NISN/FDF/ BLDG.12/MOSA

OBJECTIVES:
1. VERIFY DSS-16 CAN TRANSMIT (1 & 4 KBPS) TELEMETRY DATA TO BSS.
2. VERIFY DSS-16 CAN RECEIVE COMMANDS DATA FROM BSS.
3. VERIFY DSS-16 CAN TRANSMIT TRACKING DATA TO BSS.

RESULTS: OBJECTIVE NOT MET

REMARKS:
OBJECTIVES NOT MET. TEST WAS CANCELLED AT BSS REQUEST DUE TO PRIOR COMMITMENTS. TEST IS RESCHEDULED FOR 8/22-23/01.

Part III. Equipment Status Changes - None.

$ = Changed ETRO
** = New Items

Part IV. Scheduled Activities:

1. TILT U.S. Coast Guard Expedition 20/1044-1544Z

2. STS-105 ISS Undocking/Separation 20/1226-1810Z

3. TRMM Orbit Raising 20/1222-1308Z

4. QUIKTOMS I&T #4D Fully Integrated Test 20/1055-1830Z

5. AQUA Mission Readiness Test 20/1200-2359Z

6. TDRS-1 Network Testing with CAN/BORING. 20/1310-1810Z

7. TDRS-1 Network Testing with RID/BORING. 20/2110-0030Z

Part V. Forecast Changes:

1.) H5390LS (ATHENA/KODIAK STAR) 01 SEP. T-0=0100Z

2.) H3739LS (DELTA/JASON/TIMED) 07 DEC. T-0=UNKNOWN